

Remarks

In response to the Office action mailed October 4, 2006, Applicant confirms the election of the Group I claims, without traverse. Applicant withdraws Group II, claim 7. Claim 7 is cancelled in the present response. Claims 3-5 are also cancelled.

Section 112

Certain claims were rejected under 35 U.S.C. 112. Applicant has attempted to clarify claims 1, 2 and 6 to overcome the Section 112 rejection. The Examiner indicated that it is not clear whether "microwave radiation" is part of the claimed method of fabricating the protein array. In regard to the first step of printing the proteins on a slide, Applicant has clarified the subparagraph to state that "the proteins as printed on the slide are immobilized by microwave radiation". In the second subparagraph of claim 1, the use of microwave radiation is stated to be used for the blocking reaction.

Parentheses have been removed from claim 1 for clarification of the various terms. Various antecedents noted on page 7 of the Office action have been clarified.

Section 103

The pending claims were rejected under 35 USC §103 as being obvious over Ault-Riche et al. (2002/0137053) in view of Martin et al. (2003/0082633); Schleifer et al. (2003/0231989); Jacob et al. (2002/0095073) and Duhamel et al. (Journal of Histochemistry and Cytochemistry, Vol. 33(7):711-714; 1985). The Examiner admits that Ault-Riche et al. do not specifically teach using microwave irradiation for immobilization and accelerating the blocking reaction as recited in claim 1. The issue is whether a person skilled in

the art would combine use of microwave energy with reactions in the protein arrays. In making an obviousness rejection, the Examiner must first examine the scope and content of the prior art, ascertain the differences between the prior art and the claims at issue, and resolve the level of ordinary skill in the art. Graham v. John Deere 148 USPQ 459 (1966) To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 180 USPQ 580 (CCPA 1974).

Martin et al. are cited to teach "using microwave to accelerate chemical reactions such as those used in protein chemistry". Office action page 9. What Martin et al. specifically teach is that although microwave energy has been used as an accelerant for chemical reactions "In none of these was microwave heating directed to a solid surface, but rather microwave heating was applied to heat a bulk aqueous target." (p. 1, [0014]). As indicated in the summary, Martin et al. allow use of a solid support, but only by including a dielectric under a reactant surface. (p. 3, [0033]). This cited reference thus teaches away from the applicant's claimed method in which a glass slide is used without a dielectric layer to focus microwave energy.

Moreover, the specific uses of microwave energy as claimed by Applicant are not disclosed. In Applicant's invention, microwave energy is used twice, once for immobilization of proteins for the specific period of time of 30 to 90 seconds, and secondly, for promoting a blocking reaction by irradiating with microwave radiation for 1 to 5 minutes. The general disclosure of Martin would not lead to the specific steps claimed by Applicant.

Conclusion

Reconsideration of the claims is requested in view of the amendment and remarks herein. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

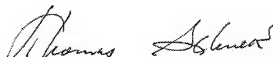
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